of form asserted in the previous Office Action; (d) do not present any additional claims without canceling a corresponding number of finally rejected claims; and (e) place the application in better form for appeal, should an appeal be necessary. The Amendment is necessary and was not earlier presented because it is made in response to arguments raised in the Final Rejection. Entry of the Amendment is thus respectfully requested.

Drawings

The drawings are objected to because there is no instance of reference character "G" in any of the drawing figures of the present application. Applicants respectfully disagree with the objection.

In particular, Applicants respectfully note Table 2 on page 9 of the originally filed application contains reference character "G" and is used to define the unit of force that measures the performance of the claimed bumper system under test conditions, i.e., 5 mph flat and 5 mph R30°. Moreover, Applicants submit that reference character "G" is the universally known symbol for the Gravitational constant and is commonly referred to as the "G-force." Applicants respectfully submit one of ordinary skill in the art would readily understand that reference character "G" represents the "G-force" otherwise known as the "Gravitational constant." For the convenience of the Examiner, Applicants enclose a table from "Physics for Scientists and Engineers" by Shelden H. Radin and Robert T. Folk, published by Prentice-Hall in 1982. The table clearly notes that reference character "G" is actually the universally accepted symbol for the Gravitational constant.

Applicants respectfully request the objection be withdrawn.

Specification

The Specification is objected to for informalities relating to reference character G. Applicants respectfully traverse the objection.

With respect to the statement by the Office Action that the drawings do not appear to show reference character G, Applicants respectfully submit the reference character G represents the universally known Gravitational constant and is illustrated in Table 2 as discussed above.

With respect to reference character G in paragraph [0024] of the specification is unclear, Applicants respectfully submit the reference character is used to help identify the gravitational or "G" force the bumper system must endure under testing. Furthermore, Applicants respectfully submit that one of ordinary skill in the art would readily understand such to be the case. However, to expedite prosecution of the present application and because the reference character is properly used in Table 2, Applicants have amended the paragraph in question to remove the apparently unclear feature.

Withdrawal of the objection is respectfully requested.

35 U.S.C. § 112, 2nd Paragraph

Claims 1-14 are rejected under 35 U.S.C. § 112, second paragraph. Applicants respectfully traverse the rejection.

Applicants respectfully note that pending Claim 1 recites "at least two brackets coupled respectively to the at least two rails frames . . . wherein each bracket *of the at least two brackets* is disposed . . ." Applicants respectfully submit that the recited each

bracket feature refers to each one, i.e., bracket, of the recited at least two brackets and as such Claim 1 provides sufficient antecedent basis for the recited feature.

With regards to the features recited by pending Claims 11 and 12, Applicants respectfully submit that the peak force and peak moment are measured during a barrier intrusion test that is conducted by colliding a vehicle having the claimed bumper system with a flat stationary object, for example. See paragraph [0021]. The structure of recited bumper system meets the conflicting requirements for pedestrian safety and 5 mph impact performance. See paragraph [0001]. Applicants respectfully submit that it is the recited structural arrangement of the claimed invention that achieves the conflicting, yet required, safety and impact performance standards. Moreover, Applicants respectfully submit that none of the applied art of record discloses or suggests such a structural arrangement.

Withdrawal of the rejection is respectfully requested.

Claims 1-14 Define Patentable Subject Matter

Claims 1, 6, and 11-14 are rejected under 35 U.S.C. § 102(b) as being anticipated by United States Patent Number 5,100,189 to Futamata et al. (hereinafter "Futamata"). Applicants respectfully traverse the rejection.

Pending claim 1 of the application recites an impact reduction vehicle bumper system including at least two frame rails, with at least two brackets coupled respectively to the at least two frame rails. A beam is attached to the at least two brackets and a plate member is attached to the beam. At least two frame rail extensions are coupled to the at least two brackets. Each bracket of the at least two brackets is disposed between and directly connected to a first longitudinal end of a corresponding frame rail of the at

least two frame rails and either one of a first longitudinal end and a second longitudinal end of the beam.

Applicants enclose herein schematic diagram A which illustrates the claimed feature of each bracket being provided between and directly contacting a first longitudinal end of a corresponding frame rail and a longitudinal end of the beam. The recited feature is clearly shown in Figures 2-3 and 5 of the originally filed application.

Futamata does not disclose or suggest each bracket of the at least two brackets being disposed between and directly connected to a first longitudinal end of a corresponding frame rail of the at least two frame rails and either one of a first longitudinal end and a second longitudinal end of the beam. Rather, as shown in schematic diagram B enclosed herein, Futamata clearly discloses the bracket 5 being disposed on or offset from a top side of the frame rail 1 and intermediate the ends of the beam 6. Also see column 3, lines 23-28 and Figures 3-4 of Futamata.

Put simply, the bracket 5 of Futamata is not disposed or provided so as to be between and directly contacting a longitudinal end of frame rail 1 and a longitudinal end of the beam 6. Instead, Futamata clearly and unambiguously discloses the bracket 5 being on an inner side surface of the frame rail 1 and directly contacts an intermediate portion of the beam 6.

To qualify as prior art under 35 U.S.C. § 102, a single reference must teach, i.e., identically describe, each feature of a rejected claim. As explained above, Futamata does not disclose or suggest each and every feature of pending claim 1. Therefore, pending claim 1 is not anticipated by or rendered obvious in view of Futamata. Accordingly, claim 1 should be deemed allowable.

Claims 2-14 depend from claim 1. It is respectfully submitted that these thirteen claims be deemed allowable for the at least the same reasons as claim 1, as well as for the additional subject matter recited therein. Applicants respectfully request withdrawal of the rejection.

Claims 1, 6, and 11-14 are rejected under 35 U.S.C. § 102(e) as being anticipated by United States Patent Number 6,398,275 to Hartel et al. (hereinafter "Hartel"). Applicants respectfully traverse the rejection.

Pending claim 1 of the application recites an impact reduction vehicle bumper system including at least two frame rails, with at least two brackets coupled respectively to the at least two frame rails. A beam is attached to the at least two brackets and a plate member is attached to the beam. At least two frame rail extensions are coupled to the at least two brackets. Each bracket of the at least two brackets is disposed between and directly connected to a first longitudinal end of a corresponding frame rail of the at least two frame rails and either one of a first longitudinal end and a second longitudinal end of the beam.

Hartel does not disclose or suggest each bracket of the at least two brackets being disposed between and directly connected to a first longitudinal end of a corresponding frame rail of the at least two frame rails and either one of a first longitudinal end and a second longitudinal end of the beam. In fact, Applicants respectfully note the Office Action admits that Hartel clearly discloses the beam 7 is indirectly attached to the at least two brackets.

To qualify as prior art under 35 U.S.C. § 102, a single reference must teach, i.e., identically describe, each feature of a rejected claim. As explained above, Hartel does

not disclose or suggest each and every feature of pending claim 1. Therefore, pending claim 1 is not anticipated by or rendered obvious in view of Hartel. Accordingly, claim 1 should be deemed allowable.

Claims 2-14 depend from claim 1. It is respectfully submitted that these thirteen claims be deemed allowable for the at least the same reasons as claim 1, as well as for the additional subject matter recited therein. Applicants respectfully request withdrawal of the rejection.

Claims 1 and 9-10 are rejected under 35 U.S.C. § 102(b) as being anticipated by United States Patent Number 5,803,514 to Shibuya et al. (hereinafter "Shibuya"). Applicants respectfully traverse the rejection.

Pending claim 1 of the application recites an impact reduction vehicle bumper system including at least two frame rails, with at least two brackets coupled respectively to the at least two frame rails. A beam is attached to the at least two brackets and a plate member is attached to the beam. At least two frame rail extensions are coupled to the at least two brackets. Each bracket of the at least two brackets is disposed between and directly connected to a first longitudinal end of a corresponding frame rail of the at least two frame rails and either one of a first longitudinal end and a second longitudinal end of the beam.

Shibuya does not disclose or suggest each bracket of the at least two brackets being disposed between and directly connected to a first longitudinal end of a corresponding frame rail of the at least two frame rails and either one of a first longitudinal end and a second longitudinal end of the beam. In fact, Applicants

respectfully note the Office Action admits that Shibuya clearly discloses the beam 5 is indirectly attached to the at least two brackets.

To qualify as prior art under 35 U.S.C. § 102, a single reference must teach, i.e., identically describe, each feature of a rejected claim. As explained above, Shibuya does not disclose or suggest each and every feature of pending claim 1. Therefore, pending claim 1 is not anticipated by or rendered obvious in view of Shibuya. Accordingly, claim 1 should be deemed allowable.

Claims 2-14 depend from claim 1. It is respectfully submitted that these thirteen claims be deemed allowable for the at least the same reasons as claim 1, as well as for the additional subject matter recited therein. Applicants respectfully request withdrawal of the rejection.

Claims 2-5 are rejected under 35 U.S.C. § 103(a) as being anticipated by Hartel, as applied to claim 1 above, and further in view of the well known prior art. Applicants respectfully traverse the rejection.

Hartel is discussed above. The Office Action admits that Hartel does not disclose the plate member, beam, brackets, and frame rail extensions being made specifically of steel. Accordingly, the Office Action states that making bumpers out of steel is well known in the art and that it would have been obvious to one of ordinary skill in the art to make the Hartel components out of steel.

Applicants respectfully submit that the applied "well known prior art" is not identified for providing features that overcome the above-described deficiency in Hartel, that is, Hartel's failure to disclose or suggest each bracket of the at least two brackets being disposed between and directly connected to a first longitudinal end of a

corresponding frame rail of the at least two frame rails and either one of a first longitudinal end and a second longitudinal end of the beam.

To establish *prima facie* obviousness of a claimed invention, all of the features recited by the rejected claim must be taught or suggested by the applied art of record. See M.P.E.P. § 2143.03. Applicants respectfully submit that Hartel and the "well known prior art," either alone or in combination, do not teach or suggest each and every feature recited by pending claims 2-5. Accordingly, Applicants respectfully submit claims 2-5 are not rendered obvious in view of Hartel and the "Well known prior art" and should be deemed allowable for their dependency on allowable claim 1, as well as the additional subject matter recited therein. Withdrawal of the rejection is respectfully requested.

Claims 7-8 are rejected under 35 U.S.C. § 103(a) as being anticipated by Hartel, as applied to claim 1 above, and further in view of United States Patent Number 4,422,680 to Goupy. Applicants respectfully traverse the rejection.

Hartel is discussed above. Goupy does not disclose or suggest each bracket of at least two brackets being disposed between and directly connected to a first longitudinal end of a corresponding frame rail of at least two frame rails and either one of a first longitudinal end and a second longitudinal end of the beam. See Figure 1 of Goupy. Put simply, Goupy does not overcome the above-described drawback of Hartel.

To establish *prima facie* obviousness of a claimed invention, all of the features recited by the rejected claim must be taught or suggested by the applied art of record. See M.P.E.P. § 2143.03. Applicants respectfully submit that Hartel and Goupy, either alone or in combination, do not teach or suggest each and every feature recited by pending claims 7-8. Accordingly, Applicants respectfully submit claims 7-8 are not

rendered obvious in view of Hartel and Goupy and should be deemed allowable for their dependency on allowable claim 1, as well as the additional subject matter recited therein. Withdrawal of the rejection is respectfully requested.

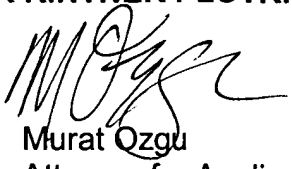
Conclusion

In view of the foregoing, reconsideration of the application, withdrawal of the outstanding objections and rejections, allowance of claims 1-14, and the prompt issuance of a Notice of Allowability are respectfully solicited.

Should the Examiner believe anything further is desirable in order to place this application in better condition for allowance, the Examiner is requested to contact the undersigned at the telephone number listed below.

In the event this paper is not considered to be timely filed, the Applicants respectfully petition for an appropriate extension of time. Any fees for such an extension, together with any additional fees that may be due with respect to this paper, may be charged to counsel's Deposit Account No. 01-2300, **referencing docket number 105450-00009**.

Respectfully submitted,
ARENT FOX KINTNER PLOTKIN & KAHN PLLC



Murat Ozgu
Attorney for Applicants
Registration No. 44,275

Enclosures: Marked Up Version of Specification as Amended
Marked Up Version of Claim 1 as Amended
Physical Constants Table
Schematic Diagrams A & B
Petition for Extension of Time (2 months)

Customer No. 004372
1050 Connecticut Avenue, NW, Suite 400
Washington, DC 20036-5339
Telephone: (202) 857-6000

CMM:MO/elp
168196_2.DOC

Marked UP Version of Specification as Amended

IN THE SPECIFICATION:

Please amend paragraph **[0024]** of the Specification as follows:

[0024] During the flat barrier testing, the two-part box was shown to meet the target performance. In order to meet the target performance for the angled barrier testing, an inner extension 8c is added. The inner extension 8c is disposed vertically between the upper 8a and lower 8b extensions. In the preferred embodiment, the inner extension 8c provides a second stage of crush strength. In particular, the inner extension 8c further limits the angled barrier intrusion without adding to the flat barrier peak floor **[G]** that was created by the two-part angled box structure. Thereby, the vehicle pedestrian safety bumper system 2 is improved, while maintaining the target peak floor **[G]** when the bumper system 2 and the barrier impact.

Marked Up Version of Claim 1 as Amended

IN THE CLAIMS:

Please amend claim 1 as follows:

1. (Amended Twice) An impact reduction vehicle bumper system, comprising:

at least two frame rails;

at least two brackets coupled respectively to the at least two frame rails;

a beam attached to the at least two brackets;

a plate member attached to the beam; and

at least two frame rail extensions coupled to the at least two brackets,

wherein each bracket of the at least two brackets is disposed between and directly connected to a first longitudinal end of a corresponding frame rail of the at least two frame rails and either one of a first longitudinal end and a second longitudinal end of the beam.